



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
25 FUNSTON ROAD
KANSAS CITY, KANSAS 66115

RECEIVED
AUG 22 1991
REML SECTION

Date: AUG 20 1991

MEMORANDUM

SUBJECT: Data Transmittal for Activity #: CS 416R
Site Description: Missouri Electric Works
FROM: Andrea Jirka
Chief, Laboratory Branch, ENSV
TO: Robert Morby
Chief, Superfund Branch, WSTM
ATTN: P. France-Isetto

Attached is the data transmittal for the above referenced site. This should be considered a Partial or X Complete data transmittal (completes transmittal of _____). If you have have any questions or comments, please contact Dee Simmons at 551-5129.

Attachments

cc: Data Files
Sharon Martin, E&E/FIT

MEW Site File
Break6_000703

| | |
|--------|--------------------|
| Site: | <u>MEW</u> |
| ID #: | <u>MO95096-932</u> |
| Break: | <u>6.3 EPA</u> |
| Other: | _____ |

NOTE: Please see Mary Gerken, SPFD-WSTM, if you want an electronic copy of the data.



S00153995
SUPERFUND RECORDS

RECYCLE
PAPER CONTAINS RECYCLED FIBER

#158 428

DRAFT

FIELD SHEET

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION VII
ENVIRONMENTAL SERVICES DIV. 25 FUNSTON RD. KANSAS CITY, KS 64115

EY: 91 ACTNO: CS46R SAMNO: 001 QCC: _ MEDIA: WATER PL: S P F D

ACTIVITY DES: MO. ELECTRIC WORKS

REF LATITUDE: _ _ _ _

LOCATION: CAPE GIRARDEAU

MO

PROJECT NUM: A33

PT: LONGITUDE: _ _ _ _

SAMPLE DES: _ _ _ _

LOCATION: CAPE GIRARDEAU

MO

BEG: 05/14/91

TIME

18:00

FROM REF PT

EAST: _ _ _ _

CASE/BATCH/SNO: _ _ _ / _ _ / _ _

LAB: _ _ _

END: 06/04/91

18:10

NORTH: _ _ _ _

STORET/SAROAD NO: _ _ _ _

DOWN: _ _ _ _

ANALYSIS REQUESTED:

CONTAINER

PRESERVATIVE

MGP

NAME

✓ 2 VOA VIALS

ICED

UV

VOLATILES

✓ GLASS

ICED

US

SEMIVOLATILES

✓ GLASS

ICED

U24

PCB - G. BEEMONT

COMMENTS:

Sample depth 210'

SAMPLE COLLECTED BY: _ _ _ _

Tedd Trumble

MEW Site File
Break6_000704

Mr. U. U. U.

MEW Site File
Break6_000705

ENVIRONMENTAL SERVICES ASSISTANCE TEAM -- ZONE II

ICF Technology Incorporated

ManTech Environmental Technology, Inc.

The Bionetics Corp.

ESAT Region VII
ManTech Env. Tech., Inc.
25 Funston Road
Kansas City, KS 66115
(913) 551-5000

TO: Barry Evans, Data Review Task Monitor/ENSV
THRU: Harold Brown, Ph.D., ESAT Contract Manager/ENSV

FROM: Rebecca K. Estep, ESAT Data Reviewer/ManTech *RE ES*
THRU: Ronald Ross, Manager/ESAT/ManTech

DATE: July 29, 1991
SUBJECT: Review of organic data for Missouri Electric Works.

TID#: 07-9103-535
ASSIGNMENT#: 873
ICF ACCT#: 302-26-535-02
ManTech S.O.#: 1073-535
ESAT Document#: ESAT-VII-535-0144

These data were reviewed according to the "Laboratory Data Validation Functional Guidelines for Evaluating Organic Analyses," February 1, 1988 revision and the "Laboratory Data Validation Functional Guidelines for Evaluating Pesticides and PCBs".

The following comments and attached data sheets are a result of ManTech Environmental Technology, Inc.'s review of the above mentioned data from the contract laboratory.

| | | | |
|---------------|-------------------------|---------------|---------|
| CASE NO.: | 16601 | LABORATORY: | SWOK |
| CONTRACT NO.: | 68-D9-0025 | METHOD NO: | CS0288A |
| SITE: | Missouri Electric Works | EPA ACTIVITY: | CS46R |
| REVIEWER: | Rebecca K. Estep | MATRIX: | Water |

Samples for Volatile, Semivolatile, and Pesticide/PCB Analysis

| <u>SMO SAMPLE NO.</u> | <u>EPA SAMPLE NO.</u> | <u>SMO SAMPLE NO.</u> | <u>EPA SAMPLE NO.</u> |
|-----------------------|-----------------------|-----------------------|-----------------------|
| GL132 | CS46R001 | GL133 | CS46R901P |

MEW Site File
Break6_000706

GENERAL

Case 16601 contained 2 environmental and 21 QC low level water samples for volatile, base/neutral and acid, and pesticide/PCB analyses. This package includes no field blanks, no field duplicate, and one performance evaluation sample. There was a sample mix-up in the laboratory for sample CS46R901P for pesticide/PCB analyses, thus, this sample was reextracted, reanalyzed, and resubmitted with this data package. Data review was performed at level 2.

1. TECHNICAL HOLDING TIMES and PRESERVATION

A. Technical holding times and required preservation are outside quality control limit requirements for the aromatic compounds by one day for volatile analyses. No data were qualified by the holding time preservation rules.

B. Technical holding times and required preservation are within quality control limit requirements for the base/neutral and acid analyses. All samples were within holding time specifications from extraction to analysis for base/neutral and acids.

C. Technical holding times and required preservation are outside quality control limit requirements by 27 days on the reextracted/reanalyzed samples CS46R901PRE and CS46R901PREDL for pesticide/PCB analyses. All compounds detected were "J" coded in sample CS46R901P for pesticide/PCB analyses due to the holding time preservation rules. All samples were within holding time specifications from extraction to analysis for pesticide/PCB's.

2. GC/MS TUNING

A. All volatile and base/neutral and acid GC/MS tunings and mass calibrations were within quality control limit requirements for bromofluorobenzene (BFB) and decafluorotriphenylphosphine (DFTPP), respectively.

3. INITIAL AND CONTINUING CALIBRATIONS

A. All average relative response factors and relative response factors on the initial and continuing calibrations, respectively, for volatile analyses were within quality control limit requirements.

B. Bromomethane was outside quality control limit requirements for percent relative standard deviation (%RSD) (greater than 30%) on the volatile initial calibration. No data were qualified due to the initial calibration rules.

C. Trichloroethene, trans-1,3-dichloropropene, and 2-hexanone were outside quality control limit requirements for percent difference (%D) (greater than 25%) on the volatile continuing calibrations. Trichloroethene in sample CS46R901W was "J" coded due to the volatile continuing calibration rules.

D. All average relative response factors on the initial calibration for base/neutral and acid analyses were within quality control limit requirements.

E. Benzo(k)fluoranthene was outside quality control limit requirements for percent relative standard deviation (%RSD) (greater than 30%) on the base/neutral and acid initial calibration. No data were qualified due to the initial calibration rules.

F. 3-nitroaniline and 3,3'-dichlorobenzidine were outside quality control limit requirements for relative response factors on the base/neutral and acid continuing calibration. These compounds were invalidated in all samples for base/neutral and acid analyses.

G. Several compounds were outside quality control limit requirements for percent difference (%D) (greater than 25%) on the base/neutral and acid continuing calibration, however, since these compounds were all non-detect in all associated samples, no data were qualified due to the continuing calibration rules.

4. PESTICIDE CALIBRATION

A. All samples were within quality control limit requirements for percent difference on the continuing calibrations, analytical sequence, and linearity on the initial calibrations quantitation columns.

B. 4,4'-DDT was outside quality control limit requirements for linearity percent relative standard deviation (%RSD) (greater than 10%) on the pesticide initial calibration confirmation column for the reanalyzed samples. No data were qualified due to the calibration rules.

5. PESTICIDE INSTRUMENT PERFORMANCE

A. All samples were within quality control limit requirements for retention time windows, DDT retention time, and DDT/endrin degradation check.

B. The percent difference on retention time check could not be evaluated for CS46R901PREDL on both the quantitation and confirmation columns because dibutylchlorendate was diluted out. No data were qualified due to the retention time check.

6. INTERNAL STANDARD RESPONSE

A. The internal standard response areas were within a factor of 2 between the samples and their associated continuing calibration response areas for volatile and base/neutral and acid analyses.

7. BLANKS

A. Three method blanks were analyzed for volatile analyses with methylene chloride and chloroform detected above the instrument detection limit (IDL) but less than the contract required quantitation limit (CRQL). No data were qualified due to the blank rules.

B. One method blank for base/neutral and acid analyses and two method blanks for pesticides/PCB's were analyzed with no compounds detected.

8. SURROGATE RECOVERY

A. All surrogates were within quality control limit requirements for percent recovery for the volatile fraction.

B. All surrogates were within quality control limit requirements for percent recovery for the base/neutral and acid fractions except for phenol-d5 (less than 10% recovery) in samples CS46R001 and CS46R001S, 2-fluorophenol (less than 10% recovery) in samples CS46R001, and CS46R001S, 2,4,6-tribromophenol (less than 10% recovery) in sample CS46R001, and 2-fluorophenol in sample CS46R001W. No data were qualified for sample CS46R001W since only one acid surrogate was outside quality control limit requirements. All acid compounds in samples CS46R001 and CS46R001S were invalidated except for phenol, 2-chlorophenol, 4-chloro-3-methylphenol, and 4-nitrophenol in sample CS46R001S which were "J" coded due to the surrogate rules.

C. All surrogates were within quality control limit requirements for percent recovery for the pesticide/PCB fraction except for dibutylchlorendate in sample CS46R001. Per the case narrative, the reason for the high percent recovery for dibutylchlorendate was due to an overlap in peaks with aroclor 1260. In sample CS46R901PREDL the surrogate was diluted out. Aroclor 1260 in sample CS46R001 was "J" coded due to the surrogate rules.

9. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A. A matrix spike/matrix spike duplicate was analyzed for volatiles with percent recovery and relative percent difference within quality control limit requirements.

B. A matrix spike/matrix spike duplicate was analyzed for base/neutral and acids with percent recovery low for 2-chlorophenol and high for 4-nitrophenol in samples CS46R001S and CS46R001W. The relative percent difference was outside quality control limit requirements for phenol, 2-chlorophenol, acenaphthene, and pyrene. No data were qualified due to the matrix spike/matrix spike duplicate rules.

C. The percent recoveries can not be determined from the pesticide/PCB data sheets for the matrix spike and matrix spike duplicate due to the fact that the sample volume and dilution on these samples resulted in the spiking concentrations detected being below the contract required quantitation limit (CRQL). Thus, these results were raised to the CRQL and "U" coded.

D. A matrix spike/matrix spike duplicate was analyzed for pesticide/PCB's with percent recovery low for aldrin in samples CS46R901S and CS46R901W. The relative percent difference was outside quality control limit requirements for heptachlor. No data were qualified due to the matrix spike/matrix spike duplicate rules.

10. PERFORMANCE EVALUATION SAMPLE

A. One performance evaluation sample was submitted to the laboratory for volatile analysis associated with this case and SDG number with all audit compounds detected.

B. One performance evaluation sample was submitted to the laboratory for base/neutral and acid analysis associated with this case and SDG number with the only audit compounds detected being phenol, 4-chloro-3-methylphenol, and 4,6-dinitro-2-methylphenol. 4-chloro-3-methylphenol and 4,6-dinitro-2-methylphenol were detected above the instrument detection limit (IDL) but less than the contract required quantitation limit (CRQL), thus, these compounds were raised to the CRQL and "U" coded. 1,2,4-trichlorobenzene and bis(2-ethylhexyl)phthalate were detected additionally.

C. One performance evaluation sample was submitted to the laboratory for pesticide/PCB analysis associated with this case and SDG number with all audit compounds detected. Endrin ketone was detected additionally.

11. COMPOUND IDENTIFICATION and QUANTITATION

A. Alpha-BHC, gamma-BHC (lindane), heptachlor, heptachlor epoxide, dieldrin, endrin, and 4,4'-DDD in sample CS46R901PRE for pesticide/PCB analysis were detected above the calibration range, thus the concentrations reported for sample CS46R901P were from the diluted sample CS46R901PREDL.

B. Several compounds in several samples for all fractions were detected above the instrument detection limit (IDL) but less than the contract required quantitation limit (CRQL). These compounds were raised to the CRQL and "U" coded.

12. SUMMARY

A. All compounds detected were "J" coded in sample CS46R901P for pesticide/PCB analyses due to the holding time preservation rules.

B. Trichloroethene in sample CS46R901W was "J" coded due to the volatile continuing calibration rules.

C. 3-nitroaniline and 3,3'-dichlorobenzidine were invalidated in all samples for base/neutral and acid analyses due to the continuing calibration rules.

D. All acid compounds in samples CS46R001 and CS46R001S were invalidated except for phenol, 2-chlorophenol, 4-chloro-3-methylphenol, and 4-nitrophenol in sample CS46R001S which were "J" coded due to the surrogate rules for base/neutral and acid analyses.

E. Aroclor 1260 in sample CS46R001 was "J" coded due to the surrogate rules for pesticide/PCB analyses.

F. The percent recoveries can not be determined from the pesticide/PCB data sheets for the matrix spike and matrix spike duplicate due to the fact that the sample volume and dilution on these samples resulted in the spiking concentrations detected being below the contract required quantitation limit (CRQL). Thus, these results were raised to the CRQL and "U" coded.

G. Alpha-BHC, gamma-BHC (lindane), heptachlor, heptachlor epoxide, dieldrin, endrin, and 4,4'-DDD in sample CS46R901PRE for pesticide/PCB analysis were detected above the calibration range, thus the concentrations reported for sample CS46R901P were from the diluted sample CS46R901PREDL.

H. Several compounds in several samples for all fractions were detected above the instrument detection limit (IDL) but less than the contract required quantitation limit (CRQL). These compounds were raised to the CRQL and "U" coded.

I. This data package generally meets the requirements for precision, accuracy, and completeness as described in SOW for Organic Analysis dated February 1988, with the exceptions noted above.

ANALYSIS REQUEST REPORT

VALIDATED DATA

FOR ACTIVITY: CS46R

S P F D

08/20/91 16:31:41

ALL REAL SAMPLES AND FIELD Q.C.

* FINAL REPORT

FY: 91 ACTIVITY: CS46R

DESCRIPTION: MO. ELECTRIC WORKS

LOCATION: CAPE GIRARDEAU

MISSOURI

STATUS: ACTIVE

TYPE: SAMPLING - CONTRACT LAB ANALYSIS

PROJECT: A33

LABO DUE DATE IS 8/5/91. REPORT DUE DATE IS 8/18/91.

INSPECTION DATE: 6/4/91 ALL SAMPLES RECEIVED DATE: 06/06/91

ALL DATA APPROVED BY LABO DATE: 06/20/91

FINAL REPORT TRANSMITTED DATE: 06/20/91

EXPECTED LABO TURNAROUND TIME IS 60 DAYS

EXPECTED REPORT TURNAROUND TIME IS 75 DAYS

ACTUAL LABO TURNAROUND TIME IS 14 DAYS

ACTUAL REPORT TURNAROUND TIME IS 16 DAYS

| SAMP. NO. | QCC | M | DESCRIPTION | SAMPLE # STATUS | CONT. | CITY | STATE | AIRS/ STORET LOC NO | BEG. DATE | BEG. TIME | END. DATE | END. TIME |
|--------------|-----|-----|---------------------------|--------------------|-------|----------------|----------|---------------------------|--------------|--------------|--------------|--------------|
| 001 | W | MO. | ELECTRIC WORKS-DEPTH 210' | 1 | 2 | CAPE GIRARDEAU | MISSOURI | | 06/04/91 | 18:00 | 06/04/91 | 18:10 |

TABLE OF CODES

VALIDATED DATA

SAMP. NO. = SAMPLE IDENTIFICATION NUMBER
 OCC = QUALITY CONTROL SAMPLE/AUDIT CODE
 M = MEDIA OF SAMPLE (A=AIR, T=TISSUE, H=HAZARDOUS MATERIAL, S=SEDIMENT/SOIL, W=WATER)
 AIRS/STORET LOC. NO. = A SAMPLING SITE LOCATION IDENTIFICATION NUMBER
 BEG. DATE = THE DATE SAMPLING WAS STARTED
 END. DATE = THE DATE SAMPLING WAS ENDED
 END. TIME = THE TIME SAMPLING WAS STOPPED
 A = RESERVED
 B = RESERVED
 PES = PESTICIDES BY CONTRACT
 E = DIOXINS/FURANS BY EPA
 FLD = FIELD MEASUREMENTS BY EPA
 G = MINERALS & DISSOLVED MATERIALS BY EPA
 HER = HERBICIDES BY EPA
 I = ION CHROMATOGRAPHY ANALYSES BY EPA
 MC = METALS BY CONTRACT
 BNC = BASE NEUTRALS BY CONTRACT
 L = FISH PHYSICAL DATA BY EPA
 MET = METALS BY EPA
 N = FISH TISSUE PARAMETERS BY EPA
 VC = VOLATILES BY CONTRACT
 P = PESTICIDES BY EPA
 Q = FLASH POINT ANALYSES BY EPA
 R = RESERVED
 BN = SEMI-VOLATILE BY EPA
 T = CYANIDE PHENOL BY EPA
 U = RESERVED
 VOA = VOLATILE ORGANICS BY EPA
 HC = HERBICIDES BY CONTRACT
 X = RESERVED
 Y = RESERVED
 TRK = ACTIVITY TRACKING PARAMETERS BY EPA
 STORET DETECTION IDENTIFIERS
 BLANK = NO REMARKS
 J = DATA REPORTED BUT NOT VALID BY APPROVED QC PROCEDURES
 I = INVALID SAMPLE/DATA - VALUE NOT REPORTED
 U = LESS THAN (MEASUREMENT DETECTION LIMIT)
 M = DETECTED BUT BELOW THE LEVEL FOR ACCURATE QUANTIFICATION
 O = PARAMETER NOT ANALYZED
 CONTRACTOR/ IN HOUSE / FIELD MEDIA GROUPS
 FIELD = * * * = AF, HF, SF, TF, WF, ZZ
 CONTRACTOR = * * * = HA, HC, HJ, HK, HO, SC, SJ, SK, SO, SW, TC, TJ, TK, TO, TW, WA, WC, WE, WJ, WK, WO, WW
 IN HOUSE = * * * = ALL OTHERS

QUALITY CONTROL AUDIT CODES
 A = TRUE VALUE FOR CALIBRATION STANDARD
 B = CONCENTRATION RESULTING FROM DUPLICATE LAB SPIKE
 C = MEASURED VALUE FOR CALIBRATION STANDARD
 D = MEASURED VALUE FOR FIELD DUPLICATE
 F = MEASURED VALUE FOR FIELD BLANK
 G = MEASURED VALUE FOR METHOD STANDARD
 H = TRUE VALUE FOR METHOD STANDARD
 K = CONCENTRATION RESULTING FROM DUPLICATE FIELD SPIKE
 L = MEASURED VALUE FOR LAB DUPLICATE
 M = MEASURED VALUE FOR LAB BLANK
 N = MEASURED VALUE FOR DUPLICATE FIELD SPIKE
 P = MEASURED VALUE FOR PERFORMANCE STANDARD
 R = CONCENTRATION RESULTING FROM LAB SPIKE
 S = MEASURED VALUE FOR LAB SPIKE
 T = TRUE VALUE OF PERFORMANCE STANDARD
 W = MEASURED VALUE FOR DUPLICATE LAB SPIKE
 Y = MEASURED VALUE FOR FIELD SPIKE
 Z = CONCENTRATION RESULTING FROM FIELD SPIKE
 MEDIA CODES
 A = AIR
 T = BIOLOGICAL (PLANT & ANIMAL) TISSUE
 H = HAZARDOUS MATERIALS/MAN MADE PRODUCTS
 S = SEDIMENT, SLUDGE & SOIL
 W = WATER
 UNITS
 NA = NOT APPLICABLE
 PG = PICOGRAMS (1 X 10⁻¹² GRAMS)
 NG = NANOGRAMS (1 X 10⁻⁹ GRAMS)
 UG = MICROGRAMS (1 X 10⁻⁶ GRAMS)
 MG = MILLIGRAMS (1 X 10⁻³ GRAMS)
 M3 = METER CUBED
 MPH = MILES PER HOUR
 SCM = STANDARD (1 ATM, 25 C) CUBIC METER
 KG = KILOGRAM
 L = LITER
 C = CENTIGRADE DEGREES
 SU = STANDARD (PH) UNITS
 # = NUMBER
 LB = POUNDS
 IN = INCHES
 M/F = MALE/FEMALE
 M2 = SQUARE METER
 I.D. = SPECIES IDENTIFICATION
 GPM = GALLONS PER MINUTE
 CFS = CUBIC FEET PER SECOND
 MGD = MILLION GALLONS PER DAY
 1000G = FLOW, 1000 GALLONS PER COMPOSITE
 UMHS = CONDUCTIVITY UNITS (1/OHMS)
 NTU = TURBIDITY UNITS
 PC/L = PICO (1 X 10⁻¹²) CURRIES PER LITER
 MV = MILLIVOLT
 SQ FT = SQUARE FEET
 P/CM2 = PICOGRAMS PER SQ. CENTIMETER
 U/CM2 = MICROGRAMS PER SQ. CENTIMETER

| ANALYSIS REQUEST DETAIL REPORT | | | ACTIVITY: 1-CS46R | | VALIDATED DATA | |
|--|-------|-----|-------------------|--|----------------|--|
| COMPOUND | UNITS | 001 | | | | |
| WP17 PCB-1016 | UG/L | 5.0 | U | | | |
| WP18 PCB-1221 | UG/L | 5.0 | U | | | |
| WP19 PCB-1232 | UG/L | 5.0 | U | | | |
| WP20 PCB-1242 | UG/L | 5.0 | U | | | |
| WP21 PCB-1248 | UG/L | 5.0 | U | | | |
| WP22 PCB-1254 | UG/L | 10 | U | | | |
| WP23 PCB-1260 | UG/L | 49 | J | | | |
| WS01 PHENOL | UG/L | N/A | I | | | |
| WS03 ETHER, BIS(2-CHLOROETHYL), BY GC/MS | UG/L | 12 | U | | | |
| WS04 2-CHLOROPHENOL | UG/L | N/A | I | | | |
| WS05 1,3-DICHLOROBENZENE | UG/L | 12 | U | | | |
| WS06 1,4-DICHLOROBENZENE | UG/L | 14 | | | | |
| WS07 BENZYL ALCOHOL | UG/L | 12 | U | | | |
| WS08 1,2-DICHLOROBENZENE | UG/L | 12 | U | | | |
| WS09 2-METHYLPHENOL (O-CRESOL) | UG/L | N/A | I | | | |
| WS10 ETHER, BIS(2-CHLOROISOPROPYL), BY GC/MS | UG/L | 12 | U | | | |
| WS11 4-METHYLPHENOL (P-CRESOL) | UG/L | N/A | I | | | |
| WS12 N-NITROSO-DIPROPYLAMINE | UG/L | 12 | U | | | |
| WS13 HEXACHLOROETHANE | UG/L | 12 | U | | | |
| WS14 NITROBENZENE | UG/L | 12 | U | | | |
| WS15 ISOPHORONE | UG/L | 12 | U | | | |
| WS16 2-NITROPHENOL | UG/L | N/A | I | | | |
| WS17 2,4-DIMETHYLPHENOL | UG/L | N/A | I | | | |
| WS18 BENZOIC ACID, BY GC/MS | UG/L | N/A | I | | | |
| WS19 METHANE, BIS(2-CHLOROETHOXY), BY GC/MS | UG/L | 12 | U | | | |
| WS20 2,4-DICHLOROPHENOL | UG/L | N/A | I | | | |

| ANALYSIS REQUEST DETAIL REPORT | | ACTIVITY: 1-CS46R | | VALIDATED DATA | |
|--|-------|-------------------|---|----------------|--|
| COMPOUND | UNITS | 001 | | | |
| WS21 1,2,4-TRICHLOROBENZENE | UG/L | 17 | | | |
| WS22 NAPHTHALENE | UG/L | 12 | U | | |
| WS23 4-CHLOROANILINE | UG/L | 12 | U | | |
| WS24 HEXACHLOROBUTADIENE | UG/L | 12 | U | | |
| WS25 4-CHLORO-3-METHYLPHENOL | UG/L | N/A | I | | |
| WS26 2-METHYLNAPHTHALENE | UG/L | 12 | U | | |
| WS27 HEXACHLOROCYCLOPENTADIENE | UG/L | 12 | U | | |
| WS28 2,4,6-TRICHLOROPHENOL | UG/L | N/A | I | | |
| WS29 2,4,5-TRICHLOROPHENOL | UG/L | N/A | I | | |
| WS30 2-CHLORONAPHTHALENE | UG/L | 12 | U | | |
| WS31 2-NITROANILINE (ORTHO NITROANILINE) | UG/L | 62 | U | | |
| WS32 PHTHALATE, DIMETHYL, BY GC/MS | UG/L | 12 | U | | |
| WS33 ACENAPHTHYLENE, BY GC/MS | UG/L | 12 | U | | |
| WS34 3-NITROANILINE | UG/L | N/A | I | | |
| WS35 ACENAPHTHENE, BY GC/MS | UG/L | 12 | U | | |
| WS36 2,4-DINITROPHENOL | UG/L | N/A | I | | |
| WS37 4-NITROPHENOL | UG/L | N/A | I | | |
| WS38 DIBENZOFURAN | UG/L | 12 | U | | |
| WS39 2,4-DINITROTOLUENE | UG/L | 12 | U | | |
| WS40 2,6-DINITROTOLUENE | UG/L | 12 | U | | |
| WS41 PHTHALATE, DIETHYL, BY GC/MS | UG/L | 12 | U | | |
| WS42 4-CHLOROPHENYL PHENYL ETHER | UG/L | 12 | U | | |
| WS43 FLUORENE | UG/L | 12 | U | | |
| WS44 4-NITROANILINE | UG/L | 62 | U | | |
| WS45 4,6-DINITRO-2-METHYLPHENOL | UG/L | N/A | I | | |
| WS46 N-NITROSODIPHENYLAMINE | UG/L | 12 | U | | |

ANALYSIS REQUEST DETAIL REPORT

ACTIVITY: 1-CS46R

VALIDATED DATA

| COMPOUND | UNITS | 001 | | | | | |
|--|-------|-----|---|--|--|--|--|
| WS47 4-BROMOPHENYL PHENYL ETHER | UG/L | 12 | U | | | | |
| WS48 HEXACHLOROBENZENE | UG/L | 12 | U | | | | |
| WS49 PENTACHLOROPHENOL | UG/L | N/A | I | | | | |
| WS50 PHENANTHRENE | UG/L | 12 | U | | | | |
| WS51 ANTHRACENE, BY GC/MS | UG/L | 12 | U | | | | |
| WS52 PHTHALATE, DI-N-BUTYL-, BY GC/MS | UG/L | 12 | U | | | | |
| WS53 FLUORANTHENE | UG/L | 12 | U | | | | |
| WS54 PYRENE | UG/L | 12 | U | | | | |
| WS55 PHTHALATE, BUTYL BENZYL | UG/L | 12 | U | | | | |
| WS56 3,3'-DICHLOROBENZIDINE | UG/L | N/A | I | | | | |
| WS57 ANTHRACENE, BENZO(A), BY GC/MS | UG/L | 12 | U | | | | |
| WS58 PHTHALATE, BIS(2-ETHYLEXYL), BY GC/MS | UG/L | 12 | U | | | | |
| WS59 CHRYSENE, BY GC/MS | UG/L | 12 | U | | | | |
| WS60 PHTHALATE, DI-N-OCTYL-, BY GC/MS | UG/L | 12 | U | | | | |
| WS61 FLUORANTHENE, BENZO(B), BY GC/MS | UG/L | 12 | U | | | | |
| WS62 FLUORANTHENE, BENZO(K), BY GC/MS | UG/L | 12 | U | | | | |
| WS63 PYRENE, BENZO(A), BY GC/MS | UG/L | 12 | U | | | | |
| WS64 INDENO(1,2,3-CD)PYRENE | UG/L | 12 | U | | | | |
| WS65 ANTHRACENE, DIBENZO(A,H), BY GC/MS | UG/L | 12 | U | | | | |
| WS66 PERYLENE, BENZO(G,H,I), BY GC/MS | UG/L | 12 | U | | | | |
| WS67 CARBAZOLE | UG/L | NA | Q | | | | |
| WV03 CHLOROMETHANE, BY GC/MS | UG/L | 10 | U | | | | |
| WV04 BROMOMETHANE, BY GC/MS | UG/L | 10 | U | | | | |
| WV05 VINYL CHLORIDE | UG/L | 10 | U | | | | |
| WV06 CHLOROETHANE, BY GC/MS | UG/L | 10 | U | | | | |
| WV07 METHYLENE CHLORIDE | UG/L | 5.0 | U | | | | |

ANALYSIS REQUEST DETAIL REPORT

ACTIVITY: 1-CS46R

VALIDATED DATA

| COMPOUND | UNITS | 001 | | | | | |
|--|-------|-----|---|--|--|--|--|
| WV08 1,1-DICHLOROETHENE | UG/L | 5.0 | U | | | | |
| WV09 1,1-DICHLOROETHANE | UG/L | 5.0 | U | | | | |
| WV10 1,2-DICHLOROETHENE, TOTAL | UG/L | 9.8 | | | | | |
| WV11 CHLOROFORM, BY GC/MS | UG/L | 5.0 | U | | | | |
| WV12 1,2-DICHLOROETHANE | UG/L | 5.0 | U | | | | |
| WV13 1,1,1-TRICHLOROETHANE | UG/L | 5.0 | U | | | | |
| WV14 CARBON TETRACHLORIDE, BY GC/MS | UG/L | 5.0 | U | | | | |
| WV15 BROMODICHLOROMETHANE, BY GC/MS | UG/L | 5.0 | U | | | | |
| WV16 1,2-DICHLOROPROPANE | UG/L | 5.0 | U | | | | |
| WV17 BENZENE, BY GC/MS | UG/L | 5.0 | U | | | | |
| WV19 TRICHLOROETHENE | UG/L | 5.1 | | | | | |
| WV20 DICHLOROPROPENE, CIS-1,3-, BY GC/MS | UG/L | 5.0 | U | | | | |
| WV21 DIBROMOCHLOROMETHANE, BY GC/MS | UG/L | 5.0 | U | | | | |
| WV22 1,1,2-TRICHLOROETHANE | UG/L | 5.0 | U | | | | |
| WV24 BROMOFORM, BY GC/MS | UG/L | 5.0 | U | | | | |
| WV25 TETRACHLOROETHENE | UG/L | 5.0 | U | | | | |
| WV26 TOLUENE | UG/L | 5.0 | U | | | | |
| WV27 1,1,2,2-TETRACHLOROETHANE | UG/L | 5.0 | U | | | | |
| WV28 CHLOROBENZENE, BY GC/MS | UG/L | 6.3 | | | | | |
| WV29 ETHYL BENZENE | UG/L | 5.0 | U | | | | |
| WV30 ACETONE, BY GC/MS | UG/L | 10 | U | | | | |
| WV31 CARBON DISULFIDE, BY GC/MS | UG/L | 5.0 | U | | | | |
| WV32 2-BUTANONE | UG/L | 10 | U | | | | |
| WV33 VINYL ACETATE | UG/L | 10 | U | | | | |
| WV34 2-HEXANONE | UG/L | 10 | U | | | | |
| WV35 4-METHYL-2-PENTANONE | UG/L | 10 | U | | | | |

ANALYSIS REQUEST DETAIL REPORT

ACTIVITY: 1-CS46R

VALIDATED DATA

| COMPOUND | UNITS | 001 | | | | | |
|--------------------------------|-------|-------|---|--|--|--|--|
| WV36 STYRENE | UG/L | 5.0 | U | | | | |
| WV37 XYLENES, TOTAL | UG/L | 5.0 | U | | | | |
| WV40 TRANS-1,3-DICHLOROPROPENE | UG/L | 5.0 | U | | | | |
| ZZ01 SAMPLE NUMBER | NA | 001 | | | | | |
| ZZ02 ACTIVITY CODE | NA | CS46R | | | | | |